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CONTENTS

FREE MEMBERSHIP?............. 3
Editorial.................... 4
Report from Sydney........... 6
A Women's Age................ 9
A Prosody Paradox............ 20
Optical Illusions............ 28
HELP......................... 30
Mailbag...................... 30
Hexplain Yourself............ 31
Humbug Column................ 33
Switchable ROM Expansion..... 34
Microtext - review........... 35
Frenzy - review........... 37
Hall of Fame................. 39
Local Meetings............... 40

ADVERTISER'S INDEX

Business World.................19
Einstein Scientific...........27
Molymerx...................... 8

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DEALS AND DISCOUNTS: Send stamped addressed envelope for details of the deals negotiated by the Wellington branch for UG members. Please mark your request for the attention of Jill Armstrong, C/O the UG Box 9592 Wgtn.

BEEBLET is edited by Bruce Wills who may sometimes be tracked down on 861-662 (h) or 720-030 (wk).

DISCLAIMER

The views of the reviewers, the Editor and other contributors are not necessarily shared by the BBC/ACORN COMPUTER USER GROUP OF NZ INC.

****

FREE MEMBERSHIP ?

Anyone interested? The National Committee has agreed, as a Christmas special, that a $5-00 DISCOUNT voucher will be available to existing members to deduct from next year's membership subscription for EVERY new full 1984/85 (current year) member they recruit before the end of December 1984, up to a limit of six.

It should be noted that the discount limit on this offer is related to the current full basic membership rate, $30-00. If, for example, the sub level was reduced in 1985/86, then the discount entitlement would be similarly reduced.

Those wishing to claim the discount vouchers should either endorse the new member's membership application form (a copy is included in this issue) with an appropriate note including your name and membership number, or attach a suitable covering note with the new member application (plus payment of course).

The new 1984/85 members would recieve back-issues of Beeblet back to January this year as per normal. If the membership drive is successful it may be repeated next year.

The reasons for this offer are that:

1. There are a large number of Beeb and Electron owners not yet members of the group.

2. The largest part of the group's budget is absorbed by the production and distribution of Beeblet. A high proportion of the latter costs are fixed costs (eg. setting up the plates for printing) and therefore the higher the number of Beeblets produced, the lower the fixed costs which have to be borne by each individual mag. If reasonable economies of scale can be achieved then this should be reflected in membership fees.

3. This offer goes some way towards meeting the concerns expressed by some members about the subscrition level, while at the same time generating additional momentum and vitality (not to mention cashflow) for the group.

****

EDITORIAL

Beeblet is beginning to feel more like a living newsletter - people are sending in a much more varied range of material. I like to hear what people are doing around the country, as I am sure do the rest of you. Of course, the backbone of the mag is still the listings, reviews and tips : so please keep them rolling in.

****

The next issue will be a combined December/January issue, so I would welcome LOTS of contributions - and the sooner the better, as I would like to get Beeblet out a little earlier for Christmas.

****

You will note that I have been taken to task again for the September cartoon in this month's mailbag. I have certainly noted these comments, and hope that they underline the need for YOU to keep me aware of what you expect from your newsletter. Even brief notes outlining what you want to see a very useful, especially if they arrive regularly. Keeping quiet because you don't understand, or are turned off for other reasons, won't improve things (here as elsewhere). PLEASE tell me.

****

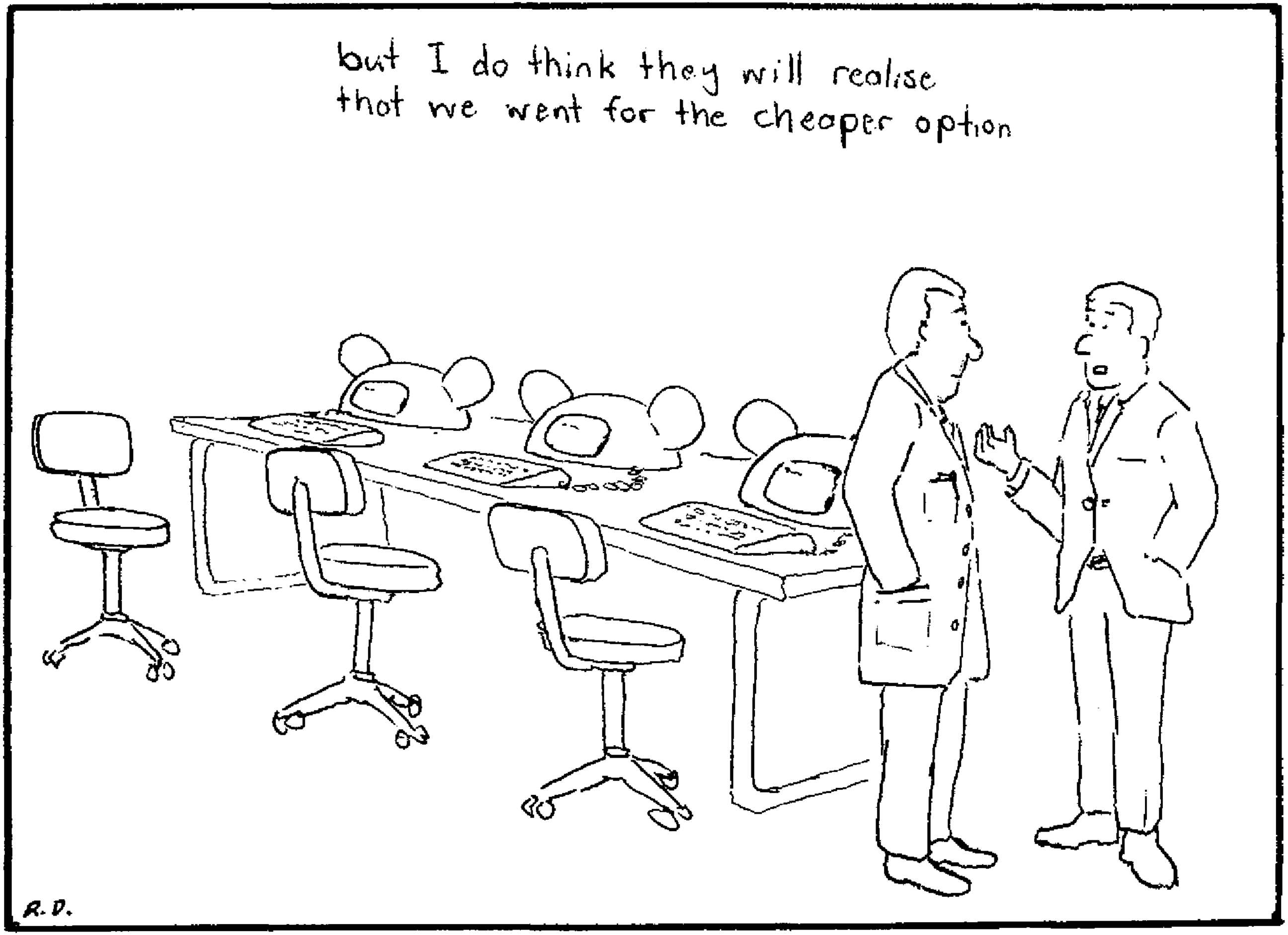
I've still got three sound and music program cassettes, donated by Alpine Computers, which look like going to whoever gets an entry in to the competition, detailed in the September issue (p21), for an educational program suitable for the 5-8 year old brigade. Close off will be the Christmas issue.

****

With the reduction of sales tax from 40% to 10% the offerings of local suppliers are looking much more attractive. Overseas prices still look attractive, until you translate them into our devalued dollar, and local sourcing eliminates such problem as being sent goods surface mail rather than airmail. Our advertisers make a significant contribution to the cost of producing Beeblet - please mention us next time you order something from one of them.

****

I hear that DISC DRIVES for the ELECTRON will be arriving in NZ towards the end of this year or early January. Check with your local retailer.



but I do think they will realise
that we went for the cheaper option

A REPORT FROM SYDNEY

Notes by Leyland C.

On a recent visit to Sydney I attended a meeting of the Sydney Acorn Educational Group. The guest speaker was John Coll who used to work at Acorn where he wrote the BBC User Manual. He is now the software Manager for MEP (Microcomputer Education Project) in the UK. The MEP is a government funded body aiming to educate teachers in computers. John seemed to be sponsored by Barsons for his visit.

John firstly gave a general talk on the distribution of software. This is selling through shops, by mail-order, as well as broadcasting (in the UK) and network systems.

Shop sale:
The buyer can purchase immediately and usually see it run. Must be a volume product but may be out of date by the time it reaches the shops.

By Post:
No pre-view, slow delivery

Broadcasting:
Low distribution costs. A large volume is possible and a "snap-shot" can be broadcast so that a buyer can see if he wants it. Transmitters can be left on at very little extra cost to transmit software.

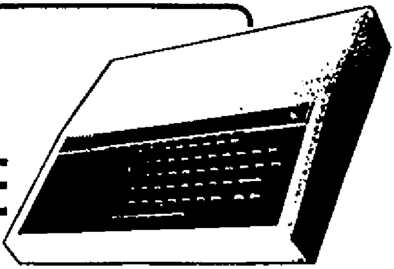
Networks:
The software is tansmitted over telephone lines. This can be either local or country wide but only local calls are needed (no toll calls) using PSS (Packet Switching System). It could be worldwide using PISS and satellite links.

Using PSS the home computer user can either have an acoustic coupler (cost approximately $A 200) at 300 Baud, with no direct connection to the telephone system, or better still a MODEM (cost $A 160 to $A 1200) at 1200 Baud, which is connected directly to the telephone system.

John demonstrated with a BBC micro and a modem the way he uses networking and a noticeboard to keep in touch with his home office in the UK while he is travelling around the world. He dialed a local number, gave an identification number and also who the call was to be charged to (Barsons) and was put through to the UK. He asked if there were any messages or letters for him. There were several, one of which had been posted only minutes earlier. He could reply to any questions or arrange meetings etc and the information would be obtained by the parties involved when they called up the noticeboard. The charges for these calls to the UK seemed to be quite low (at least for business use). John then called the "Source" in the USA. One can just "chat" with anyone else who is logged on to the system and who wishes to reply to you, or get into various databases of information or goods for sale etc. The cost of subscribing to the "Source" was said to be $A 100.

GARFIELD RULES!!

NT



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HUMANISE THE COMPUTER:

A WOMAN'S AGE

Anne F.

"Everyone" Knows that when a woman is over the age of 30 she starts counting backwards until she reaches a mature 21 years of age. Since a computer ought to earn its Keep, I offer this program which will endear it to all your female relatives as they apprehensively eye it at your Christmas family get-togethers. And to show how friendly a computer can be, it approves of her star sign, and says so!

CONTENTS:

I wanted to describe the detail for other beginners to understand - as requested by some - but without bogging down more advanced programmers. Trouble was, I didn't realise how much it involved!

Introduction (above)
Contents
History
Attempt idiot-proofing
How I saved 10K
Structure diagram
PROC details and some coding notes.
Typing it in
What got left out

SOME HISTORY:

This program was originally written on a Beeb with disc drives, for a course. The intention was to save all the information as the program ran so I could produce some graphs to show how peoples ages ranged, and how many were born each month. I also wanted to save all the data on disc in case some other use for it cropped up. Consequently when I tried to use it I had insufficient memory. The "quick" way was to re-write it for MODE 7, which gained me 26K to play with, and leave the graphs out for another program. I did. However, I thought more people might be interested in it, and gave it a massive overhaul to meet the following criteria:

1) Work on an Electron! (so no Mode 7)
2) 40 not 20 characters across the screen (eliminated Mode 5 and 2)
3) Have more than one colour apart from background (so back to Mode 1 which requires 20K screen memory)
4) still be able to save the data on either tape or disc (which you will have to work out for yourself)

(I already had my 'structured diagram' - lines 50-150!!!)

IDIOT-PROOFS?

Because your relatives will probably have had little to do with computers, I have included helpful instructions (I hope), and tried to cover most eventualities. Sorry I can't nobble BREAK; grab the machine code routines from the June issue of 'Electronics & Computing Monthly' if you like, though it includes the phrase "if you have some memory to spare". Caveat Emptor. A version saving data to disc can afford the luxury of, at the end of a person's input, opening the file, saving the data AND closing it again (helps get round BREAK being pressed). A tape file will have to remain open throughout the program, so within PROCtidy I would suggest closing the file. It will go some way to helping retrieve information.

HOW I SAVED 10K

This meant chopping back some meaningful variable names: year% became Y% month% became M% and day% became D% for a start... knocking out most of the arrays... not bothering with surname$... doing a proper structure diagram to prove it was a structured program (yes I know I should have done that first not last!)... knocking out spaces at such points as "fiddle% = age%" to become "fiddle%=age%. Consequently the program is not quite as readable as initially, but I did save the 10+ K of memory required! and in less than 5 hours.

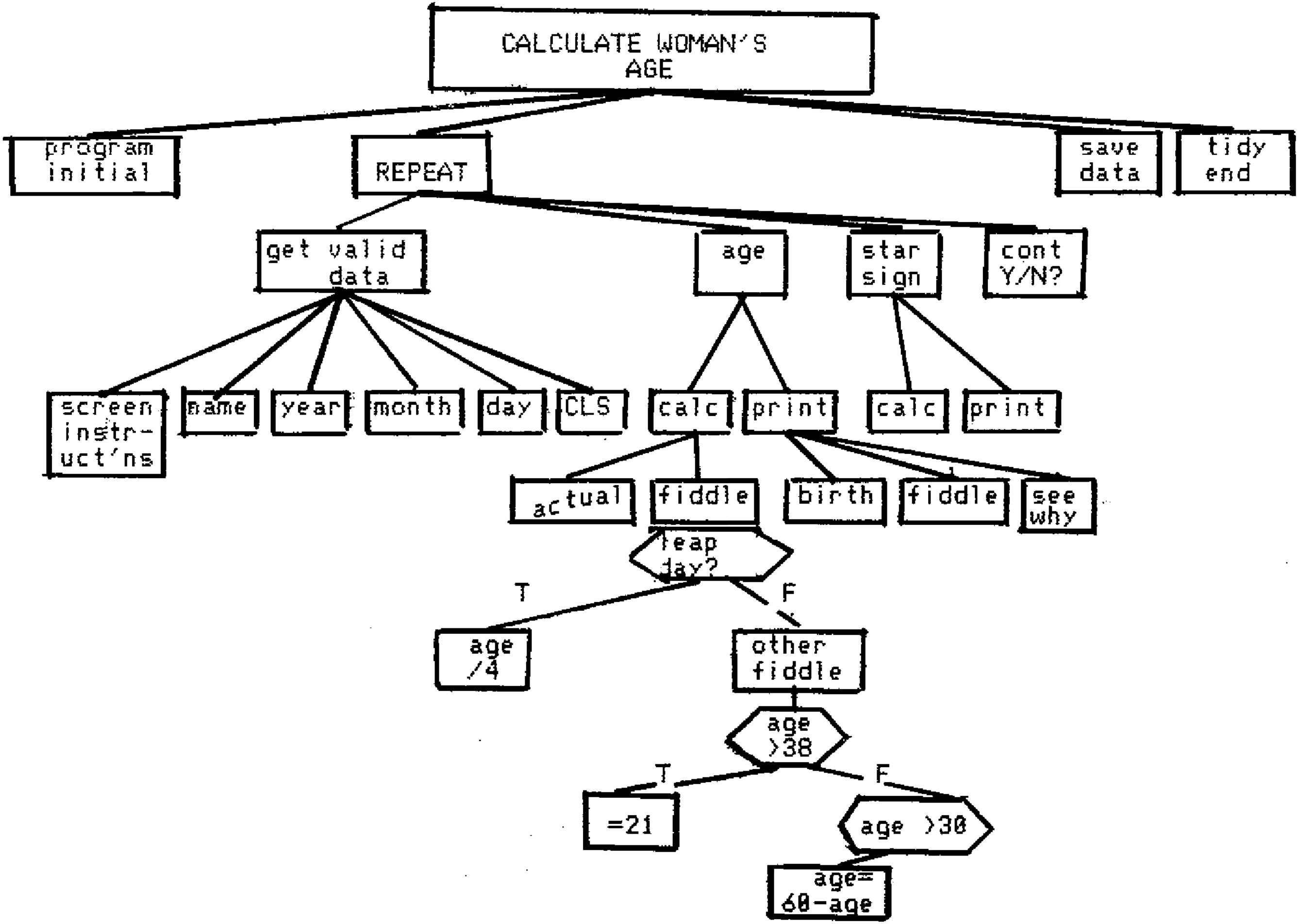
A DIAGRAM

There is a structured diagram of the upper levels of the program *somewhere round here* - ask the Ed. It only goes down through 5 levels, and not exhaustively at that, but it should give you some idea of what to expect. I have also prepared a further diagram showing the extension of one box - how to fiddle the age of the person.

PROCinit

To work out someone's age, you need to know today's date. Either you put it into code, as at line 40 OR you call PROCcollect_date to INPUT the date at the start of the program. Because PROCcollect_date uses variables not defined at line 40, call it at about line 245 and delete line 40.

line 180 another way to grab some extra memory. When checking INPUT to see if it is valid, the program requires space to do it in. I am here forcing it to use PAGE C00 (normally User-defined characters are kept in here, so if you modify the program to use them, you may like to change this line to W%=&B00 (if the User-defined Keys aren't being used...))


CALCULATE WOMAN'S AGE
program initial
REPEAT
save data
tidy end
get valid data
age
star sign
cont Y/N?
screen instr-uct'ns
name
year
month
day
CLS
calc
print
calc
print
actual
fiddle
birth
fiddle
see why
leap day?
T
F
age /4
other fiddle
age >38
T
F
=21
age >30
age= 60-age

lines 190-240 To make sure people put in a correct date of birth, an array is filled:

It sets up 12 boxes labelled dayinmonth%. The first 'box' will refer to month 1 which we know as January. January has 31 days, so line 230 will read the first number in the DATA statement, which is 31 and put it in box 1. Box 2 refers to February, so it reads the 2nd number and puts that in box 2. (February is a special case, so I've claimed it has 0 days in it. In fact, later on it checks to see if the year of birth is a leap year. It then changes box 2 to either 28 or 29, whichever is right at the time).
lines 250-270 space-saving, to do with the way the Beeb stores strings. Roughly, each time the variable is defined it will never exceed a certain length, so by setting this maximum length now the Beeb will only need this amount of memory, and no extra.

PROCget_information
PROCoverlay - cribbed from May'83 Beeblet.
First, tell Aunt Maud how to use the keyboard. Because she won't remember it all, these instructions are left on the screen until she has told the computer everything.
line 390 sets up a text window for her answers, so that only one question is visible at a time and she won't so be confused (I can't do much about the effects of the sherry).
lines 410-450 get an acceptable year of birth - hope there's no-one over 84 years old - and don't allow any unborn people to find out their age. Also find out whether born in leap year and set the number of days Feb may have accordingly.
lines 460-480 get the month they were born in, and because Queen Elizabeth hasn't added a 13th month Elizuary, don't accept a month greater than 12 (December).
lines 490-510 get a day that falls within the confines of the month they were born in eg May will allow a number up to 31, but September will only allow up to the 30th...
line 570 get rid of the text window before it mucks anything else up!

PROChold: wait until Aunt Maud is ready to carry on to the next section of the program.

FNinput(prompt$,length%)
length% is the maximum length allowed for Aunt Maud's reply; if it exceeds that it will be truncated (cut short).
line 1800 print out whatever you want as a prompt this time, and change colour so Aunt Maud's reply stands out better.

```
   10 ON ERROR PROCtidy:REPORT:PRINT" at
line ";ERL:STOP
   20 REM calculate ages by Anne F
   30 MODE1
   40 thisY%=1984:thisM%=10:thisD%=13
   50 PROCinit
   60
   70 REPEAT
   80   CLS
   90   PROCgetinformation
  100   PROCcalc_age
  110   PROCreply
  120   PROCstar
  130   UNTIL FNquit
  140 PROCtidy
  150 END
  160
  170 DEF PROCinit
  180 W%=&C00
  190 DIM dayinmonth%(12)
  200 RESTORE 210
  210 DATA 31,0,31,30,31,30,31,31,30,31,
30,31
  220 FOR I%=1 TO 12
  230   READ dayinmonth%(I%)
  240   NEXT I%
  250 adj$=STRING$(32,"*")
  260 star$=STRING$(8,"*")
  270 name$=STRING$(16,"*")
  280 ENDPROC
  290
  300 DEF PROCgetinformation
  310 COLOUR2
  320 PROCoverlay("WELCOME",416,900)
  330 COLOUR3
  340 PRINT'''''''"Please tell me a litt
le about you."
  350 PRINT''"You can reply typing at the
 keyboard."
  360 PRINT''"If you make a mistake use";
:COLOUR2:PRINT" DELETE";:COLOUR3:PRINT"
key"
  370 PRINT''"to go back and correct it."
  380 PRINT''"Press";:COLOUR2:PRINT" RETU
RN";:COLOUR3:PRINT" at the end of your a
nswer."
  390 VDU28,0,21,39,19
  400 name$=FNinput("What is your first
name?",24)
  410 REPEAT
  420   Y%=VAL(FNinput("You were born in
 the year"+CHR$17+CHR$2+"19",4))
  430   IF Y%<100 THEN Y%=Y%+1900
  440   UNTIL Y%>1900 AND Y%<=thisY%
  450 IF Y% MOD 4=0 AND (Y% MOD 100<>0 O
R Y% MOD 400=0) THEN dayinmonth%(2)=29 E
LSE dayinmonth%(2)=28
  460 REPEAT
  470   M%=VAL(FNinput("What month of "+
STR$(Y%)+" (1 - 12)",4))
  480   UNTIL M%<13 AND M%>0
  490 REPEAT
  500   D%=VAL(FNinput("What day of the
month (1 - "+STR$(dayinmonth%(M%))+")",4
))
  510   UNTIL D%>0 AND D%<dayinmonth%(M%
)+1
  520 VDU26
  530 PROChold
  540 ENDPROC
  550
  560 DEF PROCcalc_age
  570 CLS
  580 age%=thisY% - Y%
  590 IF (M%=thisM% AND D%>thisD%) OR (M
%>thisM%) THEN age%=age%-1
  600 fiddle%=age%
  610 IF M%=2 AND D%=29 THEN fiddle%=age
%DIV 4:leap%=TRUE ELSE leap%=FALSE
  620 IF leap%=FALSE AND age%>38 THEN fi
ddle%=21
  630 IF leap%=FALSE AND age%>30 AND age
%<39 THEN fiddle%=60 - age%
  640 ENDPROC
  650
  660 DEF PROCreply
  670 IF M%=thisM% AND D%=thisD% THEN PR
OCbirth
  680 PRINT''"Dear ";:COLOUR2:PRINTname$
:COLOUR3
  690 PRINT''"From this information I ded
uce you are"
  700 PRINT'SPC12;:COLOUR2:PRINTfiddle%;
:COLOUR3:PRINT" years old"
  710 REPEAT
```

line 1810 clear the Keyboard buffer of any garbage that may have crept in.
line 1820 put Aunt Maud's response in Page C00 for checking
line 1830 beep - to show the computer has got the data. Note users with a series 1 OS can redefine beep with an FX call: have fun.
line 1840 Keep doing all this until there is some response from Aunt Maud at the Keyboard.
line 1850 change the colour back to main text colour.

PROCcalc_age

The nitty gritty of the program - all 9 lines of it!!!
line 580 Aunt Maud's age is the result of subtracting her year of birth (Y%) from this year (thisY%).
line 590 refine on this - if she hasn't had her birthday yet this year, then she is in fact a year younger than you might think: subtract 1 from age%
line 600 the computer is going to 'cook the books', but without corrupting Aunt Maud's real age, so set up another varibale to do the 'cooking' with. (fiddle%)
line 610 if born on leap day, she only gets a birthday every 4th year, so her fiddled age is her real age divided by 4, and a flag (leap%) is set so if she queries her age later on, the computer can tell her the reason.
line 620 if not born on leap day, and she is really older than 38, then her fiddled age is 21.
line 630 if again not born on a leap day, and really in age somewhere between 30 and 38, she is still counting backwards to get to 21 (ie if 31, call her 29, if 32, say she's only 28...)

PROCreply

How the computer is to tell Aunt Maud her age tactfully.
line 670 It's her birthday today! Call up some congratulations as defined in PROCbirth.
Tell her how old she is, and ask if it is true or not. If she is happy with the computer's idea of her age, well and good. If she isn't, the computer has some explaining to do! :-

PROCseewhy

line 920 if she was born on a leap day, give the explanation in PROCleap
line 930 if not born on leap day, and her real age is over 30, then give the explanation in PROCpoliteage
line 940 if it's her real age, then not much the computer can do about it is there?

```
  720   PRINT''"If this is so, press Y"
  730   ans$=CHR$(ASC(FNinput("Otherwise
, press N     ",1)) AND &DF)
  740   UNTIL ans$="Y" OR ans$="N"
  750 IF ans$="N" THEN PROCseewhy
  760 PROChold
  770 ENDPROC
  780
  790 DEF PROCbirth
  800 VDU28,0,10,39,0
  810 VDU19,1,133,0,0,0
  820 COLOUR2:COLOUR129
  830 CLS
  840 PRINT''"Congratulations on acquirin
g another"''"year of infinite wisdom, re
source"''"and sagacity..."
  850 wait=INKEY(100)
  860 PRINT''"Not forgetting the suspende
rs,"''SPC22;"O Best Beloved"
  870 COLOUR128
  880 VDU26
  890 ENDPROC
  900
  910 DEF PROCseewhy
  920 IF leap%=TRUE THEN PROCleap
  930 IF leap%=FALSE AND age%>30 THEN PR
OCpoliteage
  940 IF leap%=FALSE AND age%<31 THEN PR
INT'"I'm sorry, but according to the dat
es"'"you gave me, you are indeed ";:COLO
UR2:PRINT;fiddle%:COLOUR3
  950 ENDPROC
  960
  970 DEF PROCpoliteage
  980 PRINT''"Whilst the calendar may cla
im you are"
  990 COLOUR2:PRINT;age%;",";:COLOUR3:PR
INT" I have been taught to calculate"
 1000 PRINT"a woman's age in the same ma
nner she"'"probably does."
 1010 PRINT''"That is, upon reaching the
advanced and"
 1020 PRINT"decrepit age of 30, she sens
ibly starts"
 1030 PRINT"counting backwards until she
 reaches the";
 1040 PRINT"more desirable age of 21, at
 which age"
 1050 PRINT"she remains for evermore."'
 1060 ENDPROC
 1070
 1080 DEF PROCleap
 1090 PRINT''"But I understood that every
one born on"
 1100 PRINT"29th February was only entit
led to a"
 1110 PRINT"birthday every 4th calendar
year."
 1120 PRINT"Otherwise I would suggest yo
u were ";:COLOUR2:PRINT;age%:COLOUR3
 1130 ENDPROC
 1140
 1150 DEF PROCstar
 1160 PROCsign
 1170 CLS
 1180 PRINT''''"Thank you for your help.
"
 1190 wait=INKEY(100)
 1200 PRINT''"It is so pleasant to work w
ith"
 1210 COLOUR2:PRINT'star$;:COLOUR3:PRINT
" - I generally find them"
 1220 PRINT'adj$''"and a pleasure to wor
k with."
 1230 wait=INKEY(200)
 1240 PRINT''SPC8"Thank you for your tim
e"
 1250 PROCoverlay("GOODBYE",416,400)
 1260 ENDPROC
 1270
 1280 DEF PROCsign
 1290 IF (M%=1 AND D%>20) OR (M%=2 AND D
%<21) THEN PROCaquarius
 1300 IF (M%=2 AND D%>20) OR (M%=3 AND D
%<22) THEN PROCpisces
 1310 IF (M%=3 AND D%>21) OR (M%=4 AND D
%<21) THEN PROCaries
 1320 IF (M%=4 AND D%>20) OR (M%=5 AND D
%<22) THEN PROCtaurus
 1330 IF (M%=5 AND D%>21) OR (M%=6 AND D
%<22) THEN PROCgemini
 1340 IF (M%=6 AND D%>21) OR (M%=7 AND D
%<24) THEN PROCcancer
 1350 IF (M%=7 AND D%>23) OR (M%=8 AND D
%<24) THEN PROCleo
```

PROCstar

Who would have thought the computer was interested in astrology? It's supposed to deal in concrete facts isn't it? Bad enough that it can be polite to a lady, but take in to account her star sign as well??

line 1160 call up PROCsign qv

lines 1180-1250 tell her how much the computer likes people born under her sign, and farewell her.

PROCsign

Calculate what astrological sign she was born under, and call the relevant PROC to define attributes of that star sign eg:

PROCaquarius: the star$ is the name of the star sign plus the relevant indefinite article ("a" or "an" - originally this was a separate variable called indefart$! so of course it had to be renamed).

adj$ is the string of "acceptable" adjectives that describe someone born under that star sign (according to my book of baby names!)

FNquit

You want to get out of the program safely some time won't you? This FN is essential if you are saving the data, otherwise you will lose some by pressing ESCape to get out of a REPEAT UNTIL FALSE loop.

PROCtidy

is called at the end of the program and if there is an error in the program.

It resets the cursor (VDU4 - needed if you typed a mistake in FNquit), resets the window (VDU26 - in case an error within PROCgetinformation) VDU12 is the equivalent of CLS (remember I was short of memory? snuck it in like this to save 5 bytes!)

TYPING IT IN:

Looks long, is long, but remember some short cuts called abbreviations:

C. means COLOUR to the computer

E. is ENDPROC

P. is PRINT ...

*KEY3DEF PROC

and every time you press red key 3 up pops DEF PROC all ready for you to add the rest of it.

Don't enter the spaces between line number and commands - they got there by using LISTO7 instead of the default of LISTO0 (got a User's Guide?).

```
1360 IF (M%=8 AND D%>23) OR (M%=9 AND D%<24) THEN PROCvirgo
1370 IF (M%=9 AND D%>23) OR (M%=10 AND D%<24) THEN PROClibra
1380 IF (M%=10 AND D%>23) OR (M%=11 AND D%<23) THEN PROCscorpio
1390 IF (M%=11 AND D%>22) OR (M%=12 AND D%<23) THEN PROCsagittarius
1400 IF (M%=12 AND D%>22) OR (M%=1 AND D%<21) THEN PROCcapricorn
1410 ENDPROC
1420
1430 DEF PROCaquarius:star$="an Aquarius":adj$="intuitive and idealistic - different,":ENDPROC
1440 DEF PROCpisces:star$="a Pisces":adj$="idealistic - a new concept for me -":ENDPROC
1450 DEF PROCaries:star$="an Aries":adj$="good at delegating tasks (e.g. to me)":ENDPROC
1460 DEF PROCtaurus:star$="a Taurus":adj$="reliable and patient, like me,":ENDPROC
1470 DEF PROCgemini:star$="a Gemini":adj$="intelligent, quick on the uptake,":ENDPROC
1480 DEF PROCcancer:star$="a Cancer":adj$="imaginative as well as domesticated":ENDPROC
1490 DEF PROCleo:star$="a Leo":adj$="good at organising others (such as me)":ENDPROC
1500 DEF PROCvirgo:star$="a Virgo":adj$="full of ingenious ideas yet methodical":ENDPROC
1510 DEF PROClibra:star$="a Libra":adj$="artistic and imaginative,":ENDPROC
1520 DEF PROCscorpio:star$="a Scorpio":adj$="full of energy though a bit extreme,":ENDPROC
1530 DEF PROCsagittarius:star$="a Sagittarius":adj$="sympathetic and witty (wish I was too),":ENDPROC
1540 DEF PROCcapricorn:star$="a Capricorn":adj$="painstaking in their work, industrious,":ENDPROC
1550
1560 DEF PROCoverlay(A$,X%,Y%)
1570 VDU5
1580 MOVE X%,Y%:GCOL0,1:PRINTA$
1590 MOVE X%+4,Y%+4:GCOL0,2:PRINTA$
1600 VDU4
1610 ENDPROC
1620
1630 DEF PROChold
1640   PRINTTAB(1,30)"Press the";:COLOUR2:PRINT" SPACE BAR ";:COLOUR3:PRINT"to continue."
1650 REPEAT:UNTIL INKEY(-99)
1660 *FX15,1
1670 CLS
1680 ENDPROC
1690
1700 DEF FNquit
1710 PRINTTAB(0,29)"Press Q to Quit program,"'"or SPACE BAR to continue"
1720 VDU5
1730 REPEAT
1740   UNTIL INKEY(-17) OR INKEY(-99)
1750 VDU4
1760 IF INKEY(-17) THEN =TRUE ELSE =FALSE
1770
1780 DEF FNinput(prompt$,length%)
1790 REPEAT
1800   PRINT';prompt$;:COLOUR2
1810   *FX15,1
1820   INPUT""$W%
1830  VDU7
1840   UNTIL LEN($W%)>0
1850 COLOUR3
1860 =LEFT$($W%,length%)
1870
1880 DEF PROCtidy
1890 VDU4,28,26,12
1900 ENDPROC
```

WHAT GOT LEFT OUT:

text windows I have left, and written up as a separate article.

leap year - compare with FNleap in the Easter program

saving the data - write in if you really want the code, provided it won't be used for blackmail.

REMs - they got removed as part of that 10K. Which explains why the text got so detailed!

PROCcollect_date

YOU write it!

INPUT thisY% which is this year (1984 until after Dec 31st, when it becomes 1985 I think)

INPUT thisM% which is this month in numbers (range 1-12 unless HRH fiddles it)

INPUT thisD% which is today's day and must not exceed whatever the range is suitable for this month.

and an ENDPROC too.

My age - 29 - I leave it up to you to figure out whether it is fiddle% or age%!

Slōh ða earnoste
ides ellenrōf ōþre siðe
þone hǣðenan hund, þæt him þæt hēafod wand
forð on ða flōre; læg se fūla lēap
gēsne beæften, gǣst ellor hwearf....

Then did she wield her war-worthy weapon
Reprogrammed the plotter; provoked by those people
who mirthfully mocked her bounteous beauty,
tokenised her talents, trivialised her treasures.
A punitive price she plotted for men.

Binary bits to her bidding were budged
as surely she programmed the shredder of paper;
brought ribald revenge to men's base vulgarity.
Revenge-lust wrought a beacon in blood
a warning of war of her anger aflood.

Iūdith

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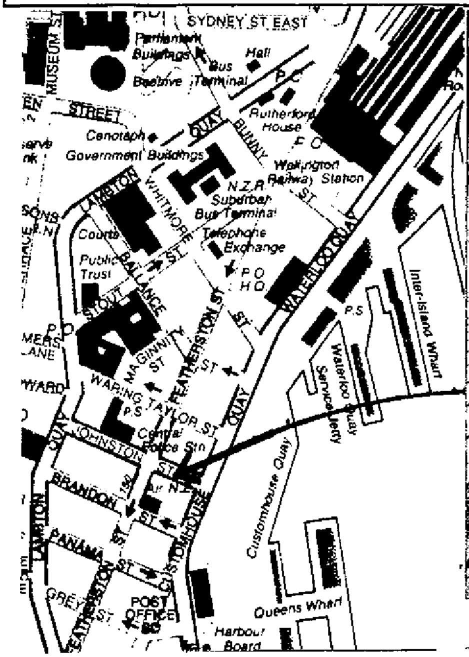

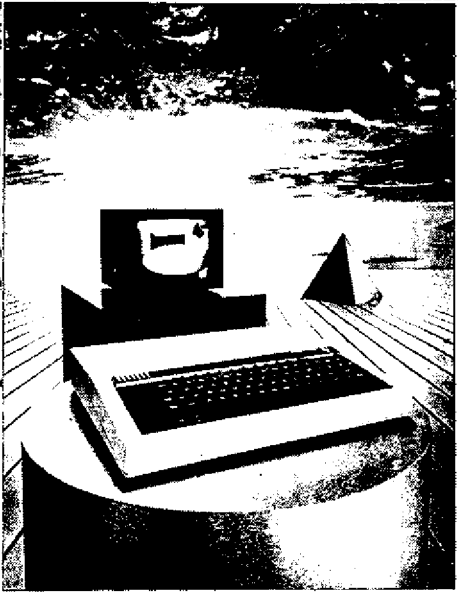

The BBC
Microcomputer System

A PROSODY PARADOX

The following missive (dated "approaching Christmas 1984") was received from an apparently disturbed MAF scientist based at the Undersea Ploughing Unit, Chattam Island.

PROSODY: "the science of versification" (Concise Oxford Dictionary).

DISCLAIMER:

The following program was developed without any recourse, whatsoever, to prosody. Nor is anyone with a reputation to maintain likely to bellow, shout or even whisper "Pirate!" The program will be of interest to poets. The interest is similar to that generated by a cowpat. Either avoid, or throw to ridicule, but do not treasure.

RANDOM POETRY GENERATION

Anton E. (suitable for both BBC and Electron)

The main program below was put together for the Wellington group's October meeting, to mark our move to the Royal Society Rooms. On the basis of some glib and spurious reasoning, Bruce (alias the editor) and Gavin (alias G.C.F) elected me as an expert on random poetry generation (known to IBM users as RPG I understand - Ed.). As *distinct from expert poetry of the random generation, random expert of the poetry generation etc.* I've removed some of the more glaring faults apparent on the night (an infinite sarch loop was the worst) but it must now be published or perish, as I have a pressing engagement (called Angela).

[Translation : The lad's just got married - Ed.]

The program works. This is one of its better tries:

when should the skull cheaply chatter
the hot marvels delude the crimson melody
scorned sounds spice the clouded fire
burn,burn marvels incense wickedly

Don't expect real poetry from the generator. It handles plurals badly, and *doesn't even bother to scan properly.* The first restriction is a very restricted vocabulary. This can be readily expanded.

THE BBC MICROCOMPUTER USERS GROUP OF NZ INC

APPLICATION FOR MEMBERSHIP 1984/5 **P.O.Box 9592, Wellington**

Surname:____________________ First name:____________________

Address:____________________ Phone Res:____________________

+ STD

____________________ Bus:____________________

____

Occupation:____________________ School or Employer:____________________

BBC serial #______________ model B / A / Electron / Other______________

SCREEN type: TV / Video / RGB . PRINTER (model):____________________

DISC: Drive (single / dual). Capacity __________ Kbytes.

Other Peripherals:____

Operating system: 0.1 / 1.0 / 1.2 Can already program / am learning on the BBC

APPLICATIONS OF INTEREST:

☐ Games ☐ Word processor ☐ Radio ham (call sign:

☐ Education ☐ Accounting ☐ Business:

☐ Networking ☐ Other:______________________________

Hobbies:____

GROUP ACTIVITIES:

I could help with: Would like to see:

☐ Committee - local / national Development of the following topics:

THE BBC MICROCOMPUTER USERS GROUP OF NZ INC

P.O.Box 9592,
Wellington,
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As an enthusiastic group of users, we think the Beeb is one of the most versatile micros available. It is designed to grow with you, in terms of ease of expansion of memory, addition of peripherals and user-invented equipment; and has a well-structured BASIC for learners and experienced people to use. It is also one of the 5 micros recommended for use in NZ schools.

THE USERS GROUP - AIMS:

1. To provide an independent forum within NZ for the exchange of information, ideas, experience and expertise.
2. To assist users - both beginners and more experienced - to take advantage of the powerful capabilities of the BBC micro.
3. Common Interests - people with interest in business systems, educational, experimental and technical ideas are able to exchange views with other members.
4. Problem solving - the Users Group represents a large resource of skills, and can pool that knowledge.
5. Discounts - bulk buying has allowed some discounts on items.

These aims are primarily focussed through the monthly newsletter.

THE NEWSLETTER:

This is 32 pages each month (except January) of programs, reviews of commercially available software, programming techniques, as well as the means for setting up special interest applications (business, education, radio hams,...)
It also offers solutions to members' problems, hints and ideas, plus information on local groups, discounts etc.

LOCAL USERS GROUPS: (as at 1/4/84)

Auckland: 2nd Wednesday of the month, VHF clubrooms, Hazel Ave, Mt Roskill. Ph. Dave Fielder 770-630 x 518 (bus)

Hamilton: last Wednesday of the month, 5.00 pm, Waikato Tech Staffroom B-block. Ph Peter 393-990

Tauranga: every second Wednesday. Ph Chris & Jane 65-076

Hawkes Bay: alternates each month between Napier & Hastings. Ph Kendall 435-624 Napier, Mitch 778-235 Hastings, Bob 446-955 Taradale.

Taupo: Ph. David 84-215

Wellington: last Thursday of the month, 7.30 pm, Staffroom, Correspondence School (first floor), Portland Cres. Ph. Anton 286-289

Christchurch: fortnightly Mondays 6.30pm Hagley High School. Door charge $1 reduced for students. Ph. Michael 582-267

MEMBERSHIP:

1. The membership fee for the subscription year 1/4/84 to 31/3/85 is $30.00.
2. For new members there is a Joining fee of $5.00 as well. They are also sent a copy of the Constitution, a tape with some of the longer or more interesting programs from the 1983/4 year, plus ALL back-issues of the current subscription year, including Feb & March '84.
3. Auckland & Wellington have a further $5.00 levy to cover meeting costs.
4. Members are also issued with an ID card which doubles as a name tag at local meetings. Extra cards for other members of the family can be produced at $1.00 each if this is indicated on the membership application (over).

If you are interested in becoming a member, fill in the membership form overleaf and mail it to the above address, or write for one.

[] Publicity

[] Software development - topics:

[] Hardware development - topics:

[] Talks on techniques - topics:

[] Other:

[] I could be a contact point for other members in my area
(Only your first name and home phone no. would be passed on)

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Membership year ending 31/3/85: $ 30.00

Signed:____________________

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The maximum size of word$(size) will depend on your machine. Change to mode 6 if you get problems by going to DIM word$(1000) : DIM type%(1000). You may have to do so anyway if you are using a TV screen for output. The VDU2 and VDU3 in the main program are to turn the printer on and off. Either miss the lines out completely, or delete the REMs if you want hardcopy.

The logic of the generator is as follows. Randomly select one of the 4 verse cases. These impose a structure of sorts on the results, to help con you into thinking that the result is meaningful.

case(1) A query. Start off with a question word followed by a vague word. Finish with garbage.
case(2) A command. Begin with a bold instruction, then degenerate into rubbish.
case(3) Start each line with one of four related words, followed by verbose effluent.
case(4) Don't have any structure, so people think that the other cases are due to the cleverness of the program.

The lines call for nouns, adjectives etc by PROCnoun, etc. These grammatical procedures then each call PROCfind, which matches for grammar and mood. Each word in the list is followed by an eight bit number. Five bits code for grammar, three for mood. Bitwise they are:

Set bit 0 if the word can act as a noun
Set bit 1 if the word can act as a verb
Set bit 2 if the word can act as an adjective as it is
Set bit 3 if the word can act as an adjective if ed is added
Set bit 4 if the word can act as an adverb if ly is added
Set bit 5 if the word has strong emotional overtones
Set bit 6 if the word is concrete and specific
Set bit 7 if the word is impersonal
Matching is by use of the bitwse operators, and I have an article half written on their use, so I'll leave that. If a suitable mood word is not readily found, the program will give up and only insist on grammar.

The following little program enables rapid setting of the bit settings without having to look at the keyboard. LINES 100,105 can be replaced by printer output (if you have one).

```
   10 REM *** Bitwise ***
   20
   30 REPEAT
   40   power%=1:bit$="  ":result%=0
   50   FOR sweep% = 0 TO 7
   60     key%= GET
   70     IF key%=32 THEN PROCzero ELSE
PROCone
   75     PROCINT TAB(15-sweep%) bit$, res
ult%
   80     power% = power% * 2
   90     NEXT
  100   PRINT
  105   VDU 7
  110   UNTIL FALSE
  120
  130 DEFPROCzero
  140 bit$ = "0"+bit$
  150 SOUND 1,-2,101,5
  160 ENDPROC
  170
  180 DEF PROCone
  190 bit$ = "1"+bit$
  200 result% = result% + power%
  210 SOUND 1,-2,137,5
  220 ENDPROC
```

Space Bar gives zero
Other keys give one
and exit by < escape >

Take "scorn" for example. It can be a noun, a verb, is not an adjective unless "ed" is added, and adding "ly" does not give an adverb. I consider it strong, specific and impersonal. (Obviously the mood classifications are subjective - perhaps "scorn" is best considered personal?). So bitwise (right to left) : 01101011 or in decimal 107.

The general methodology is outlined above. The program is sufficiently well structured to have run once spelling errors were removed. Purists can make the variables LOCAL. In particular, luck%, chance% and fluke% are indifferently intermingled, and could clash nastily if the program was modified.

If you like the program, first extend the vocabulary. I got many of the words listed from an index f poetry first lines. Next, fix up the plurals. Possibly set a flag in PROCnoun to indicate pluraity, and check this in PROCverb. If the noun is plural, don't add "s" to the verb. Personally, I doubt whether I will bother with the program again other than for demonstrarion purposes.

And finally a word about copyright. All the poems generated are not the products of an intellectual process, and are not protected by copyright. If a brilliant poem is accidently created, the author is someone who has his/her name formed by taking three letters from ACORN, repeating one and then rearranging them. Or, more simply, by deleting one letter from ANTON.

****

BEEB = British Engineering Ballsup
(because they got it right)

Anton E.

BEEB fault: I had an intermittent fault occur on my machine while developing a program. It used to hand up, especially on list. BREAK, OLD, LIST gave a proper listing. Eventually, I traced the problem. My printer was turned off! A VDU2 in the program accessed the printer buffer, a bug intercepted before VDU3 turned it off, then LIST filled the printer buffer and the machine generated continuous interrupts, and halted. BREAK Killed the VDU2 condition, OLD accessed the program which then listed perfectly.

Cure: (1) Turn on the printer mains.
(2) Remove VDU2 and VDU3.

****

```
   10 REM *** Random Poetry Generator **
*
   20 REM Version 1, Oct '84
   30 REM Anton E.
   40 
   50 MODE3
   60 DIM query$(11)
   70 FOR I%=0 TO 11: READ query$(I%):NE
XT
   80 DIM command$(13)
   90 FOR I%=0 TO 13:READ command$(I%):N
EXT
  100 DIM quat$(15)
  110 FOR I%=0 TO 15:READ quat$(I%):NEXT
  120 DIM word$(150)
  130 DIM type%(150)
  140 I%=-1
  150 REPEAT
  160   I%=I%+1
  170   READ word$(I%),type%(I%)
  180   UNTIL word$(I%)="end"
  190 size%=I%
  200 line$=STRING$(150," ")
  210 
  220 REM Main line of program
  230 CLS
  240 REPEAT
  250   PROCoption
  260   CLS
  270   REM VDU2
  280   PRINT
  290   case%=RND(4)
  300   IF case%=1 THEN PROCwherefore
  310   IF case%=2 THEN PROCcomeinto
  320   IF case%=3 THEN PROCquatrain
  330   IF case%=4 THEN PROCrandom
  340   REM VDU3
  350   UNTIL FALSE
  360 END
  370 
  380 DEF PROCoption
  390 PRINT '"   Choose a numeric Key"
  400 PRINT '"that matches a mood word"
  410 PRINT '"1 whim      2 need"
  420 PRINT '"3 breathe   4 birth"
  430 PRINT '"5 nuance    6 outcry"
  440 PRINT '"7 scenery   8 wasteland"
  450 PRINT '"SPACE BAR for no special c
hoice"'
```

```
  460 choice%=GET
  470 IF choice%<49 OR choice%>56 THEN c
hoice%=48
  480 choice%= 32*(choice%-49)
  490 ENDPROC
  500 
  510 DEF PROCwherefore
  520 luck% = RND(6)-1
  530 fluke% = RND(7) + 4
  540 line$ = " "+query$(luck%)+ " "+que
ry$(fluke%)+" the"
  550 PROCnoun : PROCadverb : PROCverb
  560 PRINT line$
  570 FOR I% =1 TO3
  580   PROCline
  590   NEXT
  600 ENDPROC
  610 
  620 DEF PROCcomeinto
  630 chance% =2*RND(7) -2
  640 line$ = " "+command$(chance%)
  650 luck% = RND(3)
  660 IF luck%<3 THEN PROCadverb
  670 line$ =line$+" "+command$(chance%+
1)+" the"
  680 PROCadjective:PROCnoun
  690 PRINT line$
  700 FOR I% = 1 TO 4
  710   PROCline
  720   NEXT
  730 ENDPROC
  740 
  750 PRINT
  760 DEF PROCquatrain
  770 chance% = RND(4) *4 -4
  780 FOR I% = 0TO 3
  790   line$ = " "+quat$(chance%+I%)
  800   PROCusual
  810   NEXT
  820 ENDPROC
  830 
  840 DEF PROCrandom
  850 PRINT
  860 chance% = 2 + RND(6)
  870 FOR I% = 1 TO chance%
  880   PROCline
  890   NEXT
  900 ENDPROC
  910
  920 DEF PROCnoun
  930 PROCfind(1)
  940 line$ = line$ + " " + word$(fluke%
)
  950 ENDPROC
  960
  970 DEF PROCverb
  980 PROCfind(2)
  990 line$ = line$ + " " + word$(fluke%
)
 1000 ENDPROC
 1010
 1020 DEF PROCadjective
 1030 PROCfind(12): temp$ = word$(fluke%
)
 1040 IF (type%(fluke%) AND 8) = 8 THEN
PROCadded
 1050 line$ = line$ + " " + temp$
 1060 ENDPROC
 1070
 1080 DEF PROCadded
 1090 end$ = RIGHT$(temp$,1)
 1100 IF end$ = "e" THEN temp$ = temp$ +
"d" ELSE temp$ = temp$ + "ed"
 1110 ENDPROC
 1120
 1130 DEF PROCadverb
 1140  PROCfind(16)
 1150 temp$ = word$(fluke%)
 1160  end$ = RIGHT$(temp$,1)
 1170 IF end$ = "y" THEN PROCifory
 1180 line$ = line$ + " " + temp$ + "ly"
 1190 ENDPROC
 1200
 1210 DEF PROCifory
 1220  temp$ =LEFT$(temp$, LEN(temp$)-1)
 1230 temp$ = temp$ + "i"
 1240 ENDPROC
 1250
 1260 DEF PROCfind(I%)
 1270 loop% =0
 1280 REPEAT
 1290   mood%=0
 1300   fluke% = RND(size%)
 1310   IF loop%<7 AND choice%>-1 THEN P
ROCmood
 1320 grammar% = (I% AND type%(fluke%))
 1330 UNTIL grammar%>0 AND mood%=0
 1340 ENDPROC
 1350
 1360 DEF PROCmood
 1370 mood% = (type%(fluke%) EOR choice%
) AND 224
 1380 loop%=loop%+1
 1390 ENDPROC
 1400
 1410 DEF PROCline
 1420 luck% = RND(5)
 1430 IF luck% = 1 THEN PROCstress
 1440 IF luck% = 2 THEN PROCme
 1450 line$ = ""
 1460 IF luck%>2 THEN PROCusual
 1470 ENDPROC
 1480
 1490 DEF PROCstress
 1500 store% = choice%
 1510 choice% = (choice% OR 32)
 1520 PROCfind(31)
 1530 line$ = " "+word$(fluke%)+", "+wor
d$(fluke%)+","
 1540 PROCnoun
 1550 line$ = line$ + "s"
 1560 PROCverb:PROCadverb
 1570 choice% = store%
 1580 PRINT line$
 1590 ENDPROC
 1600
 1610 DEF PROCme
 1620 line$ = ""
 1630 PROCverb
 1640 temp$ = line$
 1650 line$ = " I"+temp$
 1660 PROCnoun
 1670 line$ = line$ + "," + temp$  + " t
he"
 1680 PROCadjective:PROCnoun
 1690 PRINT line$
 1700 ENDPROC
 1710
 1720 DEF PROCusual
 1730 PROCadjective :PROCnoun
 1740 line$ = line$ + "s"
 1750 PROCverb
 1760 fluke% = RND(5)
 1770 IF fluke% < 4 THEN PROCadverb
 1780 line$ = line$ + " the"
 1790 IF fluke% >2 THEN PROCadjective
 1800 PROCnoun
 1810 PRINT line$
 1820 ENDPROC
 1830
 1840
 1850 REM List of 6+6 query words, 6th i
s null
 1860 DATA how,what,when,where,why,""
 1870 DATA can,does,might,should,still,t
hough
 1880
 1890 REM List of 7 command word pairs
 1900 DATA ask,of, banish,all, behold,",
",care,for
 1910 DATA drink,of, go,to, listen,to
 1920
 1930 REM List of 4 quatrain starters
 1940 DATA Whether,Or,Yet,And
 1950 DATA Neither,Nor,Despite,But
 1960 DATA Each,Every,Solely,"All, all"
 1970 DATA Beneath,"And under", Over, On
wards
 1980
 1990 REM Main data list, of words and t
heir descriptors.
 2000 REM List length is unspecified, bu
t ends in "end"
 2010 REM Bits set in descriptors (0 to
7) for:
 2020 REM Noun,verb, adjective, adjectiv
e if -ed,
 2030 REM Adverb by -ly, strong,concrete
, impersonal
 2040 DATA day,209, night, 209,sun,193,m
oon,201,star,195
 2050 DATA shadow, 139, light, 149, whit
e, 149, black, 149, golden, 212
 2060 DATA crimson, 196, blue, 197, dapp
le, 142, green, 212, rust, 207
 2070 DATA fire, 235, burn, 235, melody,
 193, sound, 151, chatter, 195
 2080 DATA twitter, 195, lull, 11, note,
 203, silent, 116, radiant, 244
 2090 DATA prison, 229, skull, 97, lone,
 52, cruel, 52, wicked, 53
 2100 DATA blind, 127, pale, 158, slant,
 206, glint, 195, evil, 53
 2110 DATA conceal, 42, incense, 43, hat
e, 43, scorn, 107, battle, 227
 2120 DATA kill, 107, despise, 42, live,
 38, sicken, 42, utter, 30
 2130 DATA move, 203, mobilise, 138, wet
, 215, dust, 203, calm, 63
 2140 DATA perpetual, 84, next, 4, bare,
 62, fierce, 52, cold, 47
 2150 DATA hot, 244, far, 132, ambiguous
, 20, eldrich, 132, odd, 20
 2160 DATA sad, 52, slither, 163, sudden
, 180, stealthy, 180, torpid, 20
 2170 DATA silly, 52, very, 164, little,
 164, old, 192, cheap, 52
 2180 DATA bitter, 116, sour, 254, sweet
, 213, cinnamon, 197, spice, 203
 2190 DATA loud, 212, bird, 193, nest, 2
03, cloud, 203, valley, 193
 2200 DATA stream, 195, mount, 203, invi
te, 74, shun, 34, ring, 203
 2210 DATA sea, 193, wave, 193, centre,
203, dream, 11, marvel, 35
 2220 DATA delude, 42, fate, 43, anger,
43, love, 59, indifferent, 20
 2230 DATA nothing, 161, everything, 129
, something, 129, tear, 99
 2240 DATA end, 163
```

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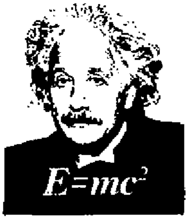
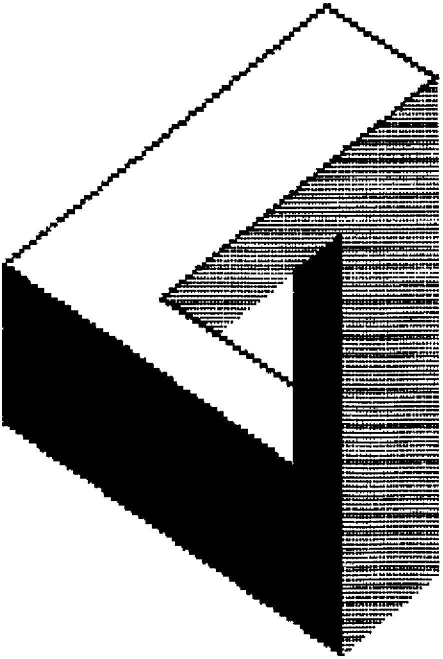
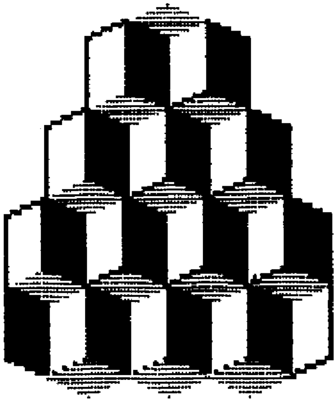
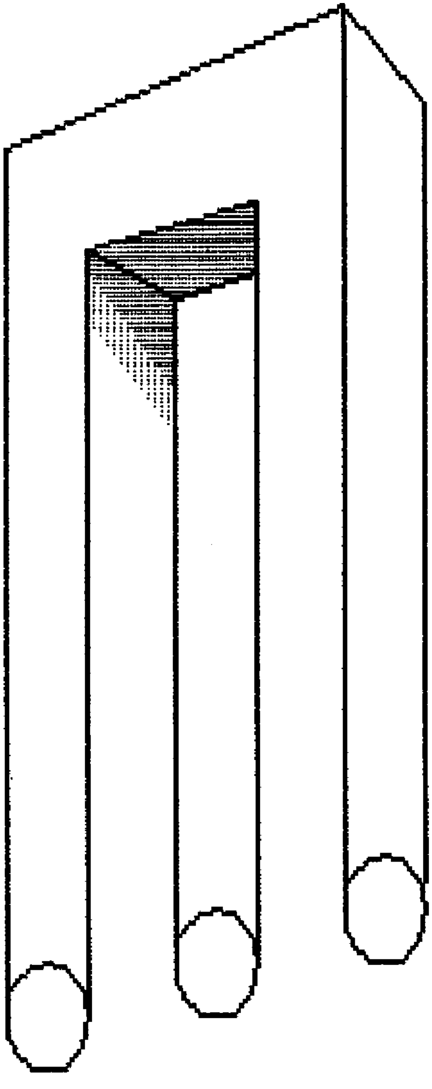


The computer world made simple.

```
   10REM  OPTICAL ILLUSIONS!
   20REM  By Neville Tomlinson
   30REM  12-October-1984
   40:
   50*TV255
   60MODE1:VDU23;2,92;0;0;0;23;8202;0;0;0;
   70VDU19,1,4;0;:GCOL0,1
   80REPEAT
   90READX,Y,A,B,N:MOVEX,Y:MOVEA,B:FORK=1TON
  100READX,Y:PLOT85,X,Y:NEXT
  110UNTILN=0:GCOL0,2
  120REPEAT
  130READX,Y,A,B,N:MOVEX,Y:MOVEA,B:FORK=1TON
  140READX,Y:PLOT85,X,Y:NEXT
  150UNTILN=0:GCOL0,3
  160REPEAT
  170READX,Y,N:MOVEX,Y:FORK=1TON
  180READX,Y:DRAWX,Y:NEXT
  190UNTILN=0
  200:
  210Y=760:GCOL0,2:FORX=840TO928STEP8
  220MOVEX,Y:DRAWX,Y-40
  230Y=Y-8:NEXT
  240FORX=208TO496STEP96:PROCBOX(X,80):NEXT
  250FORX=254TO448STEP96:PROCBOX(X,160):NEXT
  260PROCBOX(304,240):PROCBOX(400,240):PROCBOX(352,320)
  270GCOL0,1:Y=272
  280FORX=400TO496STEP48:MOVEX,Y+64:MOVEX,Y
  290PLOT85,X+48,Y+48:PLOT85,X+48,Y-16:Y=Y-80:NEXT
  300GCOL0,3:Y=320
  310FORX=256TO160STEP-48:MOVEX,Y-64:DRAWX,Y:DRAWX+48,Y+16:Y=Y-80:NEXT
  320GCOL0,2:Y=16
  330FORX=208TO400STEP96:MOVEX,Y:MOVEX+48,Y+16
  340PLOT85,X+48,Y-16:PLOT85,X+96,Y:NEXT
  350GCOL0,3:PROCCIRC(784,96):PROCCIRC(984,144):PROCCIRC(1184,192)
  360END
  370:
  380DEFPROCBOX(A,B)
  390MOVEA+48,B+16:MOVEA,B:GCOL0,2
  400PLOT85,A,B+32:PLOT85,A-48,B+16:GCOL0,1
  410MOVEA,B:PLOT85,A-48,B-48:PLOT85,A,B-64:GCOL0,3
  420DRAWA+48,B-48:DRAWA+48,B+16
  430ENDPROC
  440:
  450DEFPROCCIRC(A,B)
  460MOVEA+48,B:FORK=0TO360STEP10
  470DRAWA+48*COSRADK,B+48*SINRADK:NEXT
  480ENDPROC
  490:
  500DATA72,720,72,576,4,416,536,468,368,416,716,468,768,0,0,0,0,0,0,0
  510DATA584,442,472,368,4,584,888,472,748,256,688,320,656,1028,832,1028,768,4,8
36,788,936,744,836,768,936,664,0,0,0,0,0,0,0
  520DATA416,608,4,256,688,584,888,452,952,72,720,736,96,3,736,880,1136,1008,113
6,216,1136,1008,2,1232,920,1232,216
  530DATA832,96,3,832,788,1032,832,1032,144,936,144,2,936,744,832,788,936,744,1,
1032,768
  540DATA0,0,0,0,0
```







HELP

HELP...anyone who has experienced interfacing the BBC to the NZPO Datex system please contact David in Taupo (see back cover) or write c/o p.o Box 989 Taupo and recount your experiences.
-Please copy any correspondence to me too! -Ed.

John D. of Auckland says "I have been trying to use VIEW TO edit a BASIC program similar to that method on page 32 of June's Beeblet. I can load the ASCII version into VIEW but cannot "see" it and "no text" still shows."

I understand that VIEW has two input commands - 'LOAD' for VIEW format files, and 'READ' for unadorned ASCII files. Once you have spooled your BASIC program, try using READ <filename> to load it. Simplicity has its attractive moments for us peasants with Wordwise!

A further suggestion for Ray O'Meara of Invercargill who had not been able to get his model A upgraded. If you still haven't got an upgrade, Barsons should be able to do it if anyone can. I suggest you give Tony Krzyzewski (Auckland) a call - (09) 504-631 (Barsons) or (09) 267-6786 (h).

MAILBAG

"Another Anne" writes - " I would like to endorse the comments by "Anne" (p.4, October Beeblet) about the September cartoon. By concentrating on side issues, the Editor's comment neatly avoids dealing with the major one : the fact that the cartoon itself was blatant sexist. As a magazine Editor myself, I am sure you can find dozens of ways to break up text, and also to convey that contributions to Beeblet need not be highly sophisticated programs, without alienating 52% of the population. I sent the cartoon to 'Broadsheet' magazine for its "Hogwash" page, a dubious distinction which I hope Beeblet doen't earn again; and I enclose a new version which you will I hope, find as offensive as I found yours - and get the point."

- You are quite right Anne: I didn't challenge anything Anne F. said. I *did* raise side issues ; like no feedback, no change. Your cartoon didn't offend though, or reinforce the point (I'll have to write to you on that when I've had a bit more time to think about it). Water, as employed by the other Anne, can be used to fight fire very effectively. Please, feel free to further exercise your Editor's eye on Beeblet : how else can it be improved? What's 'Broadsheet'?

HEXPLAIN YOURSELF

Anne F.

In the days before metrication, everyone learnt how to cope with hexadecimal, duodecimal, umpteenadecimal etc. Only thing was, it wasn't usually referred to in those terms, but hexadecimal was base 16, duodecimal was base 12. Or, hexadecimal was how we turned ounces into pounds, duodecimal was how pennies became shillings and hours made their way round the (analogue) clock face; base 1780 was how we turned yards into miles, base 3 turned feet into yards...

Just as we used "/-" to mean shillings or piles of 12 pennies, so we used "lb" for lots of 16 oz's and "'" for feet or lots or 12 inches. Now we use "&" to mean lots of 16 anythings, "Kilo" for thousands of anythings etc.

When we weighed items, we started off weighing ounces, and every time we got to 16 oz we changed its name to "1lb" and carried on. So twins weighing 7lb 3 oz and 6lb 15oz added up to 14lb 2 oz. No problem. You added 15 oz to 3 oz, got 18 oz so you kept 2 oz and carried the other 16 into the lb column. Hexadecimal is exactly this: &7 3 + &6 "15" = &"14"2. Looks a little cumbersome like this, how do you know which number belongs in the ounce column and which in the pounds one without something to separate them?

Some bright spark must have been playing cards when they came up with the solution to this one. A suit is made up of 13 cards, but they aren't usually called 1,2,3,...12,13 though that is usually the numeric value of them. Cards greater than 10 got called by a name or letter:

- 11 became J or Jack
- 12 became Q or Queen
- 13 became K or King

So what did our bright spark do? Give numbers with more than one digit to their name a letter instead. He was lacking in romanticism or something, because he started at the logical place - the beginning of the alphabet.
10 became A, 11 became B etc

card pack: A 2 3 4 5 6 7 8 9 10 J Q K
ounces: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
hexadecimal: 1 2 3 4 5 6 7 8 9 A B C D E F

So the twins became &73 and &6F, or combined, &E2.

SYSTEM SOFTWARE

Steven Williams Auckland.

This UK software house, authors of ADE and SPY2 (both superb products), have just sent me details of new versions of both products which are compatible with 6502 second processor. The new versions also include several enhancements and error fixes. As a concession to NZ customers, they are prepared to offer postage-free prices for any order of 10 or more items. As well as ADE and SPY2 they offer a whole range of other software (send SAE to 61 Disraeli Street, Auckland for details). As far as I know they have no local agent, their address is :SYSTEM Software, 12 Collegiate Crescent, Sheffield S10 2BA, UK.

NOTICE TO SOFTWARE SUPPLIERS

User group members are always keen to read reviews of new or existing software for the BBC/Electron. Review copies of software should be sent to Steve Williams (Magazine officer, Auckland User Group), c/o 61 Disraeli Street, Epsom, Auckland.

Editors Note : Software suppliers may also wish to consider contacting their local BBC UG branch, or me, to arrange for hardware or software reviews. Any reviews which I arrange will require an undertaking from the reviewer, in writing if required by the supplier, that no copies will be made of the item in queston.

CLASSIFIED ADS

- 2 of 'REPLICA 2' 80 track discs, brand new in original packing complete with instructions. $33. each
- 1 of 'SPY2' ROM as reviewed in BEEBLET vol2 no7. Reason for sale ? it's beyond my level and there's no room left.Hardly used and complete with two instruction books....$60.

SOFTWARE..all in original boxing etc :-

Micro Power nee Program Power

-Junior Maths suit 4-10 yr olds $15

-Micro Budget $15

Acornsoft

-Arcade Action ..4 games.........$20

-Missing Signs suit 4-10 yr olds $15

* Contact David in Taupo (see back cover) *

HUMBUG COLUMN

(the bugs that were'nt)

David F.

1. Attempting to reserve space for files of 64K by *SAVE FILE 00000 10000 my Beeb rejected disc after disc with "Disc fault" message. It would however accept all discs if the File was not longer then &FF00 bytes......Oh well, the beast has only &FFFF bytes brain anyway.

2. On *BACKUP 0 1 the superefficient Beeb *Backupped on all 4 sides of the twin discs with devastating result......... It was a miracle that the said beast is still alive.

Before dispatching it to have a brain transplant I had occasion to disconnect and shifting various peripherals I noticed that the Disc Drive cable connector to the Beeb was a little open at the joint. On reconnection, this was pushed together firmly........No prizes for the right guesses, the Beeb now works obediently accepting all discs and files as big as you like, and *Backs up as modestly as it should.

** "Beebs like others need to be squeezed firmly from time-to-time."

3. On page 179 of the September issue of Micro User a certain person from Glos. discovered a way to speed up the Beeb by typing:

```
?&FE45=255
?&FE46=255
```

and claimed an increase of speed of 2500%........I should have waited longer before I bought the second processor! Oh Hell! Then I tried the secret formula and Bingo! TIME certainly was printed out in much smaller numbers but subjectively I felt it actually took longer. Perhaps Einstein was right after all. Just to make quite sure I tried again and this time timed it with an external clock as well. Do you believe it? The external clock matched my feeling rather then the Beeb......but then perhaps the clock and I were travelling on the same train? ......I should have stayed with religion!

4. The 6502 co-processor on the other hand does felt and work faster, much as I had expected. So far no problem except this: When asked to print StringA, StringB, StringC, StringD etc, the Strings were all tangled and twisted. The User Guide intimated that this is "Increases in precision and efficiency". Come to think of it I have heard that expression often in my work place and something always end up in a twist. It took a little while for me to figure this one out: Preface my programmes with 10 @%=10. With a "Decrease in precision and efficiency" everything is back to normal.

SWITCHABLE ROM EXPANSION BOARD

Lyndon Mc Riverton

Having filled up two Sir ROM boards and still needing more ROM space, I set about constructing a switchable expansion board. This was veru simple and consists of two rows of 28-pin sockets, one row with 7, the other 6, with all pins wired in parallel except for pins 1 & 28 (power) and pin 20 (select). This allows for two rows of 6 ROMs plus a socket to take a header plug for connection to the computer. The power and select pins were taken to a 12 position, double bank wafer switch.

I had to use 40 pin header plugs as there seemed to be no 28-pin plugs yet available. These were crimped onto a 15cm lenght of ribbon cable with one end plugged into ROM socket 14 of the Beeb. The rightmost socket (15) has some terminals in the way which prevents insertion of the 40-pin plug.

On power-up, everything worked fine and to my surprise, when selecting ROMs with the wafer switch, only a press of the BREAK key was needed to activate them. I expected that a hard break would be necessary.

The board has worked with no problems for several weeks now. It is a real pleasure to have 12 ROMs available at the turn of a switch. Many of my ROMs are incompatible - eg VIEW and Disc Doctor which I use the most - but their selection is a breeze.

The board can be built into a standard box which has to sit right next to the Beeb as close as possible to the Beeb's ROM sockets. It will not work at all if the connecting cable is more than about 20cm long. Screening or buffering would be required for a longer cable length. Withsuch refinements it would be possible to connect a 12 ROM board to each of the present 16 sockets allowing a massive 3 Megabytes of switchable ROM which would be considerably cheaper than Watford's Apex system - although not as versatile of course. The board is far more convienient to use thab Viglen's plug in cartridges.

With the prototype fully operational, I have now planned a board to fit inside my co-processor case. It uses the internal power supply and the wafer switch is mounted in the lid. The connecting cable fits under both lids (which can't be screwed right down - a very minor diadvantage) and is hardly visable in use. This produces a neat and powerful system.

MICROTEXT

ACORNSOFT. Review copy supplied by Whitcoulls.

Reviewed by Anne F.

'Microtext' is not so much a programming language as an "authoring system" - it tries to make it easier for a non-programmer to produce 'programs' to run on a computer.

It is intended to facilitate development of interactive questionnaires, lessons, simulations, training material etc. A program can be likened to a book. It is subdivided into modules (chapters) which are in turn divided into frames (a page). These frames usually correspond to what you see on the screen at one time. It is indeed fairly easy to produce screenfuls of information and to move on to further screens. Editing the frame is a little more complicated than in Basic or Wordwise.

The package consists of a 120p User Guide, a Welcome booklet, reference card, function key strip, and the software. There are several versions of the software:
1. cassette: will cope with 0.1 OS and 1.0+, but cannot use disc. To get back to Basic usefully with a disc interface fitted requires switching the Beeb off at the back. I cannot recommend the tape version although this is what was reviewed, because of its inability to use discs etc.
2. disc: will run on either tape or disc (or both), across the tube, and on machines with Econet interface. It won'+ work with the Econet Filing System though.
3. Econet version: will work within Econet
4. ROM: an extended disc version (may be unavailable still, but in the pipeline).
I would suggest the disc version (or ROM) would be the most flexible purchase; (if you can afford any version, then you can afford to upgrade from 0.1 OS. which obviates the need for the tape version).

On the tape (disc, ...) are the Microtext files and some demonstration programs. The 'Escape from Hotel on Fire' is a gripping simulation / adventure game in miniature, and far more relevant to today's world than XYZZY. The Plug fault-finding demo used a teletext representation of a 3-pin plug. It's a British one with a fuse in it, which flummoxed me at one point.

Microtext obviates all the vetting needed in Basic programs of the

user responses: it ignores Upper or Lower case variations, searches for a key word within a response automatically:
Q. Who Killed Cock Robin?
A. any response with 'sparrow' in it is correct eg: "The sparrow" or "SPARrow"...
In BASIC the program would be looking for INSTR("wot the response was", "SPARROW") plus variations on it.

Most of the manual is devoted to getting Microtext programs running (in teletext mode, though any graphics mode with 40 characters can be used - the predictable restraint is memory). I found some of its explanations too concise, and it required a lot of trial and error to get the RETURN command to do what was wanted. It has some useful features:
$PAUSE is used to introduce a wait, or to pace the printing to screen of text. In the sample program here it forces text to be printed out with a 5 tenths of a second delay between each character - a fair reading speed (see frame 45)
Printout - teletext control codes are represented by "@", so you know something is there, even if not visible on the screen. Frame 45 has a control code to print the heading in blue
$COMMENT is the same as REM in Basic.
! means "Get an answer of one character and don't wait for Return"
the "]" is an arrow pointing right, so "A]40 RETURN10" in frame 10 means:
"If the reply is 'A' then do Frame 40 and come back to Frame 10" (GoSubbish it is!)
A frame could be roughly likened to a line number with no limit to the length of the 'line'.

Within limits explained in the U.G., Microtext modules can be transferred between other brands of machine. It has Viewdata capabilities incorporated also.

If time or confidence is lacking to get fully in to programming in BASIC this package could be rather useful to get specific programs running quickly. Careful planning is needed; it is easy to get in to endless loops (spaghetti?). For certain types of programs it is certainly easy to manipulate, and to transfer a written page to the screen. BBC graphic commands do exist within Microtext, usually labelled in a little more friendly fashion:
"$PAL colour,palette" is "VDU19,colour,palette,0,0,0"
"$TRI x,y" is "PLOT85,x,y"
The graphics commands are only listed, not explained: you have to refer to the BBC (BASIC) User Guide for that.

There are also commands to make use of the User port, and "*" commands can be used within Microtext.

Have a wander through the "listing" here.
The frame number is at top left of each frame.
.... means the end of a frame.
The questions were taken from the Standard Driving Test; to each incorrect answer the computer repeats the rules and gives you another chance at the question (in fact you can't do another question until you get the first one correct as it is written here.) It is possible to get the program to tot up the number of attempts at each question and the number of correct replies and give the score at the end, and there is plenty of room for more use of colour, sound, diagrams etc.

****

'FRENZY' by Micropower

Reviewed by David F. Taupo

This game is something of a cross between 'Snake' ex the Welcome tape and 'Crazy Painter'. Your job is to capture the sub-atomic particles that bounce round the screen plus avoid being killed by the chasers. Your block shaped craft leaves a trail wherever it goes and provided you can make it back to a static line without being hit the area enclosed by the trail fills in therby killing any particle within the enclosure... however the same result is achieved by filling in 95% of the screen. Both particles and chasers multiply/go faster the more you wipe out.

Although the game does not come with a joystick option those of you with a joystick utility will be in your element.

The sound effect's are good,the graphics fair and it's an addictive game for all.....also it'S the only one I can beat the kid's at....

****

```
*5
$COMMENT this excerpt is testing a
$COMMENT section of the road code:
$COMMENT Night driving
]45RETURN
......................................
*10

When should you dip your headlights?

A  in a tunnel
B  in a Limited Speed Zone
C  following another vehicle
D  approaching a railway crossing
!

A]40 RETURN 10
B]40 RETURN 10
C]50 RETURN
D]40 RETURN 10
......................................
*15

For safe driving at night you should:

A  Clean windscreens, head lights and
   tail lights
B  Wear sunglasses
C  Keep lights always on full beam
D  Keep a steady speed whatever the
   conditions
!
A]50 RETURN
B]40RETURN15 C]40RETURN15 D]40RETURN15
......................................
*20

When should you dip your headlights?

A  approaching a 50Kph area
B  in a limited speed zone
C  in a one-way street
D  when they might dazzle another driver
!
D]50 RETURN
A]40RETURN20 B]40RETURN20 C]40RETURN20
......................................
```

```
*25


You have finished this section.

Press SPACE BAR to end
!
......................................
*30
$END
......................................
*40
That is incorrect...


$JOIN
]45
......................................
*45
@          NIGHT DRIVING:


@ RULES:
$PAUSE CHAR10
Dip your headlights
 -  for oncoming traffic
 -  when following another vehicle
 -  for a person on point duty
 -  if you have to stop on the roadside
    for any reason
 -  where street lighting is adequate
$PAUSE CHAR 5

Press SPACE BAR to try again
!
]RETURN
......................................
*50

That is correct.

Press SPACE BAR for the next question.
!
]RETURN
......................................
```

HALL OF FAME

PUBLISHER:	GAME	HISCORE	SCORER
Acorn	Aviator	150	Kendall
	Countdown	227	Tim R.
	Hopper	27,196	Jenny B.
	Meteors	24,090	Duncan's flatmate
	Monsters	93,560	Linsay F.
	Starship Command	7,073	Robert N.
A&F	Cylon Attack	68,340	Robert N.
Badger	Lunar Lander	245,967*	Duncan's flatmate
Level 9	Colossal Cave	687	Steve W.
	Dungeon Adv.	330	Anne et al
Pace	Fortress	20,600	Kendall
Prog.Pow	DangerUXB(Lvl 1)	286,690	Steve W.
	Felix the Factory	7,000	Dianne S.
Sup.Soft	Alien Dropout	24,200	David E.
	Q*BERT	30,260	Dianne S.
	Roadrunner	70,600	Lois S.

*Hardest level.

HALL OF FAME

* * *

TOKEN EXCEPTION

G.C.F.

Most keywords in BASIC are stored as single byte tokens (eg. COLOUR is stored as a byte containing &FB). But there is at least one exception to this - 'TOP' is actually stored as two bytes (&B860). The first byte is the token for "TO" and the second is the ASCII value of the letter "p".

Are there any other exceptions?

* * *

USER GROUP MEETINGS

AUCKLAND:-meets 2nd Wednesday of the month, 7.30pm, Conference Rooms, Auckland Secondary Teachers College, 60 Epsom Ave, EPSOM. ph Dave 770-630 x 518(bus) or Kerry 95-355.

CHRISTCHURCH:-fortnightly workshops, Monday 6.30pm at Hagley High School. ph. Michael 582-267.

HAMILTON:-Waikato Tech B-block staffroom ?. Ph. Peter, Hamilton 392-500 x 897(bus) or Alison, Morrinsville 6695.

HAWKES BAY:-Alternative months Hastings & Napier. Contact Kendall Napier 435-624, Bob Taradale 446-955, Mitch Hastings 778-235.

INVERCARGILL:-Phone Evan 330-444 Invercargill.

PALMERSTON NORTH:-Phone Tom Skinner 83-009 (wk).

TAUPO: -Contact Dave 84-215.

TAURANGA:-every second Wednesday. ph. Chris & Jane 65-076.

TIMARU:- Meetings to be arranged in the first week of each month. Contact Chris Stone ph. Timaru 60394.

WELLINGTON:-meets LAST Thursday of the month, 7.30pm, Royal Society Lecture Theatre, Turnbull St, Thorndon. ph. Anton 286-289 or Warren 787-005.

OTHER CENTRES:- let us know and we will publish details here.

THE NEWSLETTER:

CONTRIBUTIONS:-most welcome. Listings should be sent in on tape or disc.(Tape - 2 copies,one at 300 baud please). A 35c stamp gets your tape / disc returned too. Please include written explanation of listing; text only material welcome too.

DEADLINES:- For a particular issue, the last day for material is the last day of the month prior to publication.

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Membership of the users group is on payment of an annual subscription from April to March. For the 1984/5 year it is: $30.00, plus a $5.00 joining fee for new members, plus $5.00 for Auckland & Wellington members as a local branch levy, which entitles attendance at meetings as detailed above. Renewing members get all back issues of the current year; New members also get back issues to v.1 #1 Jan '84.

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